

1. Apparatus for underwater applications, comprising:  
a modular unit having a top wall, a bottom wall, two  
side walls and two end walls interconnected to form a hollow interior;  
each of said side walls having a tapered section formed  
5 with a through bore which intersects said hollow interior;  
each of said end walls extending generally vertically  
between said bottom wall and said top wall, said end walls each being  
formed with a through bore which intersects said hollow interior;  
said top wall being formed with a through bore which  
10 intersects said hollow interior;  
a number of supports extending from said bottom wall,  
said supports being adapted to assist the stabilization of said modular  
unit on the floor of a body of water.

2. The apparatus of claim 1 in which said through bore of  
one end wall substantially aligns with said through bore of said other  
end wall.

3. The apparatus of claim 1 in which said tapered section of  
each of said side walls extends at an angle of about 45°.

4. The apparatus of claim 3 in which said through bore in  
each of said side walls is formed with an angled, lower portion

extending in a direction toward said bottom wall, said angled, lower portion being contacted by a flow of water entering said hollow  
5 interior of said modular unit to create a downward force on said modular unit tending to enhance the stabilization thereof on the floor of a body of water.

5. The apparatus of claim 1 in which said supports are a number of legs extending from said bottom wall.

6. The apparatus of claim 1 in which said supports are a lip extending from the periphery of said bottom wall.

7. The apparatus of claim 1 in which said modular unit forms an artificial reef and marine habitat along the floor of a body of water.

8. The apparatus of claim 1 in which said modular unit is positioned within a body of water relative to a beach at the edge of said body of water to form a sea wall.

9. The apparatus of claim 1 in which said bottom wall is formed with a through bore which intersects said hollow interior.

10. Apparatus for underwater applications, comprising:

a modular unit having a top wall, a bottom wall, two side walls and two end walls interconnected to form a hollow interior, each of said side walls having a tapered section formed

5 with a through bore which intersects said hollow interior;

each of said end walls extending generally vertically between said bottom wall and said top wall, said end walls each being formed with a through bore which intersects said hollow interior;

said top wall being formed with a through bore which  
10 intersects said hollow interior;

at least one support extending from said bottom wall of said modular unit;

an anchoring device adapted to rest upon the floor of the body of water, said anchoring device being formed with mounting  
15 structure which engages said at least one support to connect said modular unit to said anchoring device.

11. The apparatus of claim 10 in which said at least one support is a number of legs extending from said bottom wall.

12. The apparatus of claim 11 in which said anchoring device comprises at least one rail unit which includes a first rail and a second rail spaced from said first rail, each of said first and second rails being formed with a number of openings, said modular unit  
5 being placed in position to straddle said first and second rails so that each of said legs of said modular unit is received within an opening in one of said first and second rails.

13. The apparatus of claim 12 in which said first rail and said second rail of said at least one rail unit are connected to one another by at least one cross brace.

14. The apparatus of claim 12 in which a number of rail units are positioned side-by-side in abutting relationship, said first rail and said second rail of those rail units which abut one another being formed with aligning mounting holes, said aligning mounting  
5 holes receiving a connector extending between said rail units to secure abutting rail units together.

15. The apparatus of claim 11 in which said anchoring device includes at least one rail unit having a first rail and a second rail connected together by at least one cross brace, each of said first

and second rails being formed with a recess which receives one of said  
5 legs extending from said bottom wall.

16. The apparatus of claim 11 in which said anchoring  
device comprises first and second outer rails and first and second  
inner rails, each of said first and second outer rails being formed with  
a row of spaced openings, each of said first and second inner rails  
5 being formed with two side-by-side rows of spaced openings, said first  
and second inner rails being connected to one another and to one of  
said first and second outer rails.

17. The apparatus of claim 16 in which said spaced openings  
in said first and second outer rails and in said first and second inner  
rails are positioned so that said legs of said modular unit are received  
within said openings in one of said inner rails and in one of said outer  
5 rails.

18. The apparatus of claim 17 in which said first and second  
inner rails are positioned relative to one another so that said legs of  
said modular unit are received within one row of said openings in  
said first inner rail and one row of said openings in said second inner  
5 rail.

19. A marine structure for underwater applications,  
comprising:

a number of modular units each including:

5 (i) a top wall, a bottom wall, two side walls and two  
end walls interconnected to form a hollow interior,

(ii) each of said side walls having a tapered section  
formed with a through bore which intersects said hollow  
interior;

10 (iii) each of said end walls extending generally  
vertically between said bottom wall and said top wall,  
said end walls each being formed with a through bore  
which intersects said hollow interior;

(iv) said top wall being formed with a through bore  
which intersects said hollow interior;

15 each of said modular units being capable of being placed  
in an upright orientation with said top wall vertically above said  
bottom wall, and in an inverted orientation with said top wall  
vertically below said bottom wall;

a first group of modular units being located side-by-side  
20 in an upright orientation along the floor of a body of water, and a  
second group of modular units being located in between adjacent first  
modular units and placed in an inverted orientation so that said  
tapered section of each side wall of a modular unit in said second

group contacts said tapered section of one side wall of one modular  
25 unit and said tapered section of one side wall of an adjacent modular  
unit in said first group.

20. The marine structure of claim 19 in which said through  
bore in said tapered section of said side walls of each modular unit in  
said first group aligns with said through bore in said tapered section  
of one side wall of a modular unit in said second group.

21. The marine structure of claim 19 in which said first and  
second groups of modular units form a first row, a third group of  
modular units and a fourth group of modular units forming a second  
row, said modular units of said third and fourth groups being placed  
5 end-to-end relative to said modular units of said first and second  
groups.

22. The marine structure of claim 21 in which said third  
group of modular units are located side-by-side in an upright  
orientation along the floor of a body of water, and said fourth group of  
modular units are located in between adjacent third modular units  
5 and placed in an inverted orientation so that each side wall of a  
modular unit in said fourth group contacts one side wall of one

modular unit and one side wall of an adjacent modular unit in said third group.

23. The marine structure of claim 22 in which said through bore in said tapered section of said side walls of each modular unit in said third group aligns with said through bore in said tapered section of one side wall of a modular unit in said fourth group.

24. The marine structure of claim 21 in which said through bore in one end wall of said first and second modular units of said first row aligns with said through bore in one end wall of an adjacent third and fourth modular unit, respectively, of said second row.

25. The marine structure of claim 19 in which each wall of said modular unit has an exterior surface, said exterior surface of at least some of said walls being formed with indentations.

26. The marine structure of claim 19 in which said through bore of one end wall substantially aligns with said through bore of said other end wall.

27. The marine structure of claim 19 in which said tapered section of each of said side walls extends at an angle of about 45°.



28. The marine structure of claim 19 in which said through bore in said side walls of each modular unit is formed with an angled, lower portion extending in a direction toward said bottom wall, said angled, lower portion being contacted by a flow of water entering said  
5 hollow interior of said modular unit to create a downward force on said modular unit tending to enhance the stabilization thereof on the floor of a body of water.

29. The marine structure of claim 19 in which each of said modular units has a number of supports extending from said bottom wall, said supports being adapted to assist the stabilization of said modular units on the floor of a body of water.

30. The marine structure of claim 29 in which said supports are a number of legs extending from said bottom wall.

31. The marine structure of claim 29 in which said supports is a lip extending from the periphery of said bottom wall.

32. The marine structure of claim 19 in which said first group and said second group of modular units collectively form a barrier reef.

33. The marine structure of claim 19 in which said first group and said second group of modular units collectively form a marine habitat.

34. The marine structure of claim 19 in which said first group and said second group of modular units collectively form a sea wall.

35. The marine structure of claim 19 in which said bottom wall is formed with a through bore which intersects said hollow interior.